

CLAIMS

1. An intake manifold for a fresh air system of an internal combustion engine, in particular in a motor vehicle, having a pipe section (2) which is assembled from at least two pipe parts (3, 4) which are manufactured as injection-molded parts and are joined together by a joint (12) formed by a material integrally molded or injected into the area of a parting line (5) between the pipe parts (3, 4).
2. The intake manifold according to Claim 1, characterized in that
  - the intake manifold (1) has a bellows section (6) which is jointed to the pipe section (2),
  - the bellows section (6) is designed as an injection-mold part and is integrally molded or vulcanized onto the pipe section (2).
3. The intake manifold according to Claim 2, characterized in that the joint (12) and the bellows section (6) are made of the same material.
4. The intake manifold according to Claim 2 or 3, characterized in that the joint (12) of the bellows section (6) are designed in one piece together.
5. The intake manifold according to any one of Claims 1 through 4, characterized in that a ring gasket (13) is integrally molded or vulcanized onto the pipe section (2).

6. The intake manifold according to any one of Claims 1 through 5,  
characterized in that  
the pipe parts (3, 4) form in the area of their parting line (5) at least one injection channel (11) into which the joint (12) is injected.
7. The intake manifold according to any one of Claims 1 through 6,  
characterized in that  
the material of the joint (12) is coordinated with the material of the pipe parts (3, 4) so that the material of the joint (12) attaches the pipe parts (3, 4) to one another by means of adhesion and/or fusion.
8. The intake manifold according to any one of Claims 1 through 7,  
characterized in that  
the pipe parts (3, 4) are designed in the area of their parting line (5) so that the material of the joint (12) joins the pipe parts (3, 4) together in a form-fitting manner.
9. A method for manufacturing an intake manifold (1) for a fresh air system of an internal combustion engine, in particular in a motor vehicle
  - in which at least two pipe parts (3, 4) are manufactured as injection-molded parts,
  - in which parts (3, 4) are joined together to form a pipe section (2),
  - in which a joint (12) is integrally molded or injected using a material which joins the pipe parts (3, 4) to one another in the area of a parting line (5) between the pipe parts (3, 4).

10. The method according to Claim 9,  
characterized in that  
a bellows section (6) is integrally molded or  
vulcanized onto one end (7) of the pipe section (2).
11. The method according to Claim 10,  
characterized in that  
the integral molding or injection of the compound (12)  
and integral molding of the bellows section (6) are  
performed in a joint operation.
12. The method according to Claim 10 or 11,  
characterized in that  
the same material is used for the joint (12) and for  
the bellows section (6).
13. The method according to any one of Claims 10 through  
12,  
characterized in that  
before integral molding or injection of the compound  
(12) and before integral molding of the bellows  
section (6), a hollow space for receiving the material  
of the bellows section (6) with one hollow space or  
with multiple hollow spaces to accommodate the  
material of the joint (12).
14. The method according to any one of Claims 9 through  
13,  
characterized in that  
a ring gasket (13) is integrally molded or vulcanized  
onto an end (8) of the pipe section (2).
15. The method according to Claim 14,  
characterized in that  
the integral molding of the ring gasket (13) performed  
in the same operation as the integral molding of the

bellows section (6) and/or the integral molding or injection of the joint (12).

16. The method according to any one of Claims 9 through 15,  
characterized in that  
the pipe parts (3, 4) in the assembled state form at least one injection channel (11) into which the material of the joint (12) injected in the area of their parting line (5).
17. The method according to any one of Claims 1 through 16,  
characterized in that  
the material of the joint (12) is coordinated with the material of the pipe parts (3, 4) so that the material of the joint (12) joins the pipe parts (3, 4) to one another by means of adhesion and/or fusion.
18. The method according to any one of Claims 9 through 17,  
characterized in that  
the pipe parts (3, 4) are designed in the area of their parting line (5) so that the material of the joint (12) joins the pipe parts (3, 4) together in a form-fitting manner.
19. The method according to any one of Claims 9 through 18,  
characterized in that  
the same material is used for two members from the group of the joint (12), the bellows section (6) and the ring gasket (13).